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A second palaearctic species of the genus *Dichaetomyia* Malloch (Diptera: Muscidae)

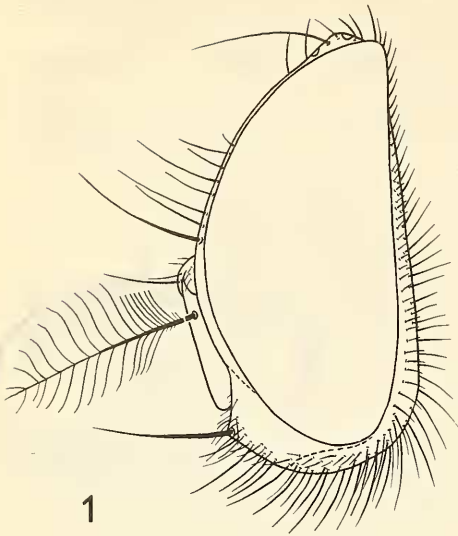
By Adrian C. Pont, London

With 6 Figures

At the kind suggestion of Prof. Dr. W. HENNIG, Stuttgart, I have been able to study the specimens of a second palaearctic species of the genus *Dichaetomyia* Malloch, to which reference was made by Prof. HENNIG in his revision of the palaearctic Muscidae (1964: 1081). This material was found to represent an undescribed species, and its discovery sheds interesting light on the age and evolutionary history of *Dichaetomyia*, a large and widespread genus in tropical and subtropical regions of the Old World. It also makes the presence in Western Europe of the other palaearctic species of *Dichaetomyia*, *doubleti* (Pandellé), appear rather less startling. I am very grateful to Prof. HENNIG for the privilege of studying and describing this interesting species.

Dichaetomyia caucasica n. sp.

♂. Head (fig. 1): Frons slender, at narrowest point separated by diameter (holotype), or slightly more than diameter (paratype), of anterior ocellus. Eyes virtually bare, with only the usual microscopic pubescence; upper inner facets enlarged as usual, but not conspicuously so. Ocellar setae moderate, not as long as anterior prst dc. Vertical setae short, only slightly longer than the adjacent post-ocular setulae. Post-ocular setulae short, with several scattered setulae below the upper row. Parafrontalia, parafacialia and face silvery-white pruinose, genae thinly grey dusted. Interfrontalia, viewed from below, with the visible parts grey dusted. Parafrontalia slender, broadening out at lunula to just under twice diameter of anterior ocellus. Interfrontalia extremely slender, two small triangles visible before ocellar tubercle and lunula; actually obsolete on median two-thirds of frons in holotype, present as a line on median two-thirds in paratype. Ori quite well developed, 6—7 pairs with several interstitials, extending about half distance from lunula to ocellar tubercle and decreasing gradually in length from lunula. 2 pairs of weak reclinate ors just before ocellar tubercle. Antennae and basal half of arista pale brownish, 3rd segment becoming slightly darker towards apex and whitish pruinose. 3rd segment about $3\frac{1}{2}$ times as long as broad. Arista with long regular plumosity, the longest of which almost equals length of 3rd antennal segment. Parafacialia slender, opposite insertion of arista about as broad as diameter of anterior ocellus, not much tapered below. Parafacialia and genae bare. Genae obscurely reddish-brown in front; the depth below lowest eye-margin slightly less than width of 3rd antennal segment. In lateral view, vibrissal angle projecting slightly beyond anterior level of frons. Peristomal setae dense, especially behind. Facial ridges without small setulae above the cluster of setulae at vibrissal angle. Proboscis rather long and slender, mentum dark brown, thinly grey dusted. Palpi dark brown, compressed, weakly spatulate towards apex. — Thorax: Thorax, including pleura and scutellum, wholly dull yellow in ground-colour, except for the small brown triangular sclerite below the infra-alar bulla. All setae and setulae

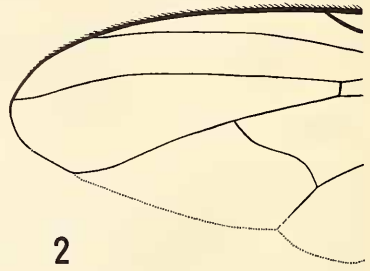


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Figs. 1—2.

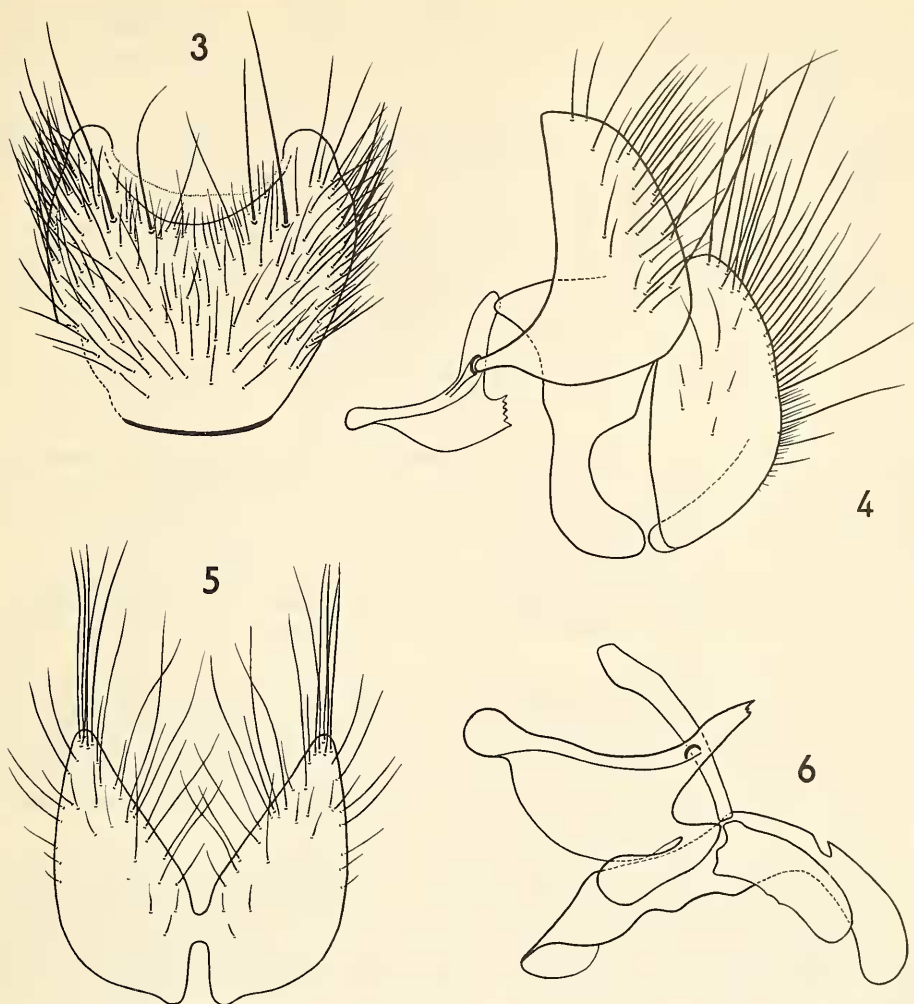
Dichaetomyia caucasica n. sp. Holotype ♂.

1: head, lateral view; 2: wing.



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black unless otherwise stated. Mesonotum very thinly and inconspicuously whitish dusted, without dusted vittae from any points of view. Pleura virtually undusted. Flap-like covering of the spiracles pale yellow. Mesonotum with the ground-setulae short and dense. Acr 0+1, the single (prsc) pair closer to each other than to prsc dc and on a transverse level with the dc. Dc 2+4, all well developed; the 2nd post pair weaker than the 1st, this latter closer to suture than to 2nd pair. 2 h, the outer one not much longer than the inner. 2 ph, the anterior one very fine and about half length of the posterior one. 2 ia. Pra weak, about half length of 2nd npl, closer to suture than to anterior sa. 2 sa, the posterior one weak. Post-alar callus with 2 setae, with several setulae between inner seta and scutellum. Post-alar declivity with several scattered setulae. Prosternal setulae short and rather dense. Propleural depression bare. 1 propleural and 1 prostigmatal seta, each with a stronger setula below, the former surrounded by few, the latter by numerous, setulae. 1st npl longer and stronger than 2nd; disc of notopleuron with several setulae around the setae. Mesopleuron with 4 stout setae in caudal row, and 1 conspicuous setula in upper anterior corner. Infra-alar bulla bare. Pieropleuron with the setulae on sub-alar ridge confined to anterior part, descending rather densely to upper margins of sternopleuron and hypopleuron. The sclerite above sub-alar ridge bare. Stpl 1+2, the anterior one weakest, the lower posterior one closer to upper posterior one than to anterior one. Hypopleuron with several setulae below spiracle and on pre-episternite III, beret bare. Pleuratergite below lower squama bare. Scutellum with 1 pair of strong crossed apical setae and a pair of strong crossed laterals; 2 lateral and 2—3 sub-apical discal setulae rather strong and conspicuous. Disc, as mesonotum, with short dense setulae that extend on to lateral margins of scutellum and also invade ventral surface. — Legs: Legs yellow, tarsi brown. Fore femur without av setae or setulae, with a complete pv row. Fore tibia without a submedian p seta, the ventral pubescence rather erect in apical half. Mid femur with several pv setae in basal third that become shorter and more setulose in apical two-thirds, without av setae; 1 a and 3 d-p preapical setae. Mid tibia with 2 p setae. Hind femur with 6—7 av setae in apical half, the 3 before apex long and strong; about 6—7 pv setae in basal three-fifths; ad row complete; 2 d and 1 pd preapical setae. Hind tibia with 1 submedian ad and 2 weaker av (3 in paratype) setae; a few of the pd ground-setulae stronger and more erect, but no calcar; d and ad preapical setae subequal. Tarsi normal. Claws and pulvilli short. — Wings (fig. 2):



Figs. 3—6. *Dichaetomyia caucasica* n. sp. Paratype ♂. 3: 5th sternite; 4: hypopygium, lateral view, aedeagus omitted; 5: cercal plate, caudal view; 6: hypandrium and aedeagus, lateral view.

Rather conspicuously yellowish tinged, wing-base deep yellow. Basicosta and epaulet yellow. Subcostal sclerite bare. Costa setulose ventrally almost to apex of vein 2, the spine inconspicuous. Stem-vein bare above, with a few inconspicuous pale setulae below. Small cross-vein placed almost directly below the point where vein 1 enters costa. Hind cross-vein sinuous, oblique. Vein 3 bare above, below with a few setulae on node that extend a short distance towards cross-vein. Vein 4 weakly curved forward towards vein 3 in apical quarter of last section. Squamae and halteres deep yellow, squamae bare. — **Abdomen:** Tergite 1+2, and tergite 3 except hind margin, yellow; tergites 4 and 5, and hind margin of tergite 3, shining black, hardly dulled by dust from any point-of-view. Tergites with few macrochaetae; tergites 4 and 5 with a row of rather strong erect marginals, tergite 5 also with several discals. Sternite I with conspicuous black setulae. — **Hypopygium:** See figs. 3—6. — **Measurements:** Length of body 7.0—8.0 mm, length of wing 7.0—8.0 mm.

♀. Differs from the male as follows. **Head:** Frons broad, at vertex almost one-third of head-width. Upper inner eye-facets not enlarged. Ocellar setae long and

strong, subequal to 2nd prst dc, directed forwards and outwards. Vti long and strong, incurved, longer than the outcurved vte; pvt weak, divergent. Parafrontalia silvery-white pruinose only on lower half, grey becoming subshining black in upper half. Interfrontalia broad, with very weakly convex margins, bare; ground-colour black, thinly grey dusted when viewed from below; frontal triangle visible from some angles as a weak subshining black streak on upper third of frons. Parafrontalia broader, at middle of frons equal to twice diameter of anterior ocellus. 4—5 pairs of inclinate ori, with a few weak interstitials, only the lowest pair really strong; 2 pairs of stout reclinate ors, the upper one about $1\frac{1}{2}$ times as long as lower one and placed closer to it than to vti; parafrontalia otherwise with rather numerous short proclinate setulae from vertex to lunula. Parafacialia rather broader, opposite insertion of arista about $1\frac{1}{2}$ times diameter of anterior ocellus. — Thorax: 2nd post dc stronger than the 1st. Outer h considerably longer than inner. Pra longer, subequal to 2nd npl (but slightly shorter in 1 ♀). — Legs: Hind femur with 4—5 av setae in apical third, and only a few short pv setae in basal half. — Wings: Vein 3 with a setula on node at base on upper surface. — Ovipositor: Not studied. — Measurements: Length of body 8.0—8.5 mm, length of wing 7.5—8.0 mm (a headless ♀ has a wing-length of 7.0 mm).

Holotype ♂, AZERBAYDZHAN: Talysch, 1897 (KARB). In the Staatliches Museum für Naturkunde, Stuttgart.

Paratypes, 1 ♂ and 3 ♀♀, AZERBAYDZHAN: data as for holotype. Male in the British Museum (Natural History), London, females in the Staatliches Museum für Naturkunde, Stuttgart.

Affinities: *D. caucasica* belongs to the group of species related to *quadrata* (Wiedemann) and *nubiana* (Bigot), and differs from *quadrata* by, i. a., the wholly dull yellow mesonotum, which is but feebly dusted and without vittae, the more intense yellow colour of wing-base and squamae, the weaker pra and anterior ia, and the more numerous ori and stronger ors. It may be distinguished from *nubiana* and allies by the presence of 4 post dc setae.

In VAN EMDEN'S (1942) key to the Ethiopian *Dichaetomyiini*, *caucasica* will run to *analisis* (Stein), but I have recently shewn (PONT, 1966) that VAN EMDEN had misidentified *analisis*, the lectotype of which is a species of the subgenus *Panaga* Curran.

Whether *caucasica* is a relic species, thereby possessing the plesiomorphic characters of *Dichaetomyia*, or whether it is a comparatively recent derivative of Oriental *quadrata-nubiana* stock, is at present an open question that future investigations must answer.

Key to the palaearctic species of *Dichaetomyia* Malloch

- 1 Fore tibia with a submedian p seta. Dc 2+3. Pra absent. Scutellum bare on lateral margins and ventral surface. Hypopleuron bare *doubleti* (Pandellé)
- Fore tibia without submedian setae. Dc 2+4. Pra present, weak in male, strong in female. Scutellum with black setulae on lateral margins and ventral surface. Hypopleuron with setulae below spiracle and on pre-episternite III.

caucasica n. sp.

References

- EMDEN, F. I. VAN. 1942. Keys to the Muscidae of the Ethiopian Region: *Dichaetomyia*-group. — Ann. Mag. nat. Hist. (11), IX: 673—701 and 721—736.
- HENNIG, W. 1955—1964. Muscidae, in LINDNER, E., Fliegen paläarkt. Reg., 63b, 1110 pp. Stuttgart.
- PONT, A. C. 1966. Über eine fehlgedeutete äthiopische Art der Gattung *Dichaetomyia* Malloch (Diptera: Muscidae). — Beitr. Ent., 16: 219—222.

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